



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,967	11/21/2001	Travis J. Parry	10008078-1	1662

7590 02/01/2008
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

SCUDERI, PHILIP S

ART UNIT	PAPER NUMBER
----------	--------------

2153

MAIL DATE	DELIVERY MODE
-----------	---------------

02/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/989,967

Applicant(s)

PARRY, TRAVIS J.

Examiner

Philip S. Scuderi

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8-11 and 13-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-11 and 13-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/18/2007 has been entered.

Response to Arguments

I. 35 U.S.C. § 112, ¶1

Applicant's arguments filed 12/18/2007 (herein "Remarks") in regards the present amendments being supported by the specification have been fully considered but they are not persuasive.

Applicant has amended claim 1 to recite the limitation "the controller is further adapted to ... limit the list of other imaging device network addresses to those other imaging devices that are similar to the imaging device" (see Remarks at pp. 7). Applicant argues that this limitation is supported by, for example, paragraphs 0013 and 0022 of the specification (see id.)

This argument is not deemed persuasive. Of the two sections cited paragraph 0022 comes closest to supporting the limitation at issue where it states that it is "preferential that the stored list of imaging devices are similar." But, this section does not reasonably suggest that controller 112 limits the list of network addresses to those of similar imaging devices.

Paragraph 0033 shows how the list of addresses is compiled where it discloses that a “query message is received 322 by the network device and is responded to 324 if the network device is an imaging device, enabling the imaging device embodiment of the present invention to build the list of imaging devices.” This operation is clearly different than having the controller (112) of the imaging device that sent the query “limit” the list of other imaging device network addresses to those other imaging devices that are similar to the imaging device, as required by claim 1.

II. 35 U.S.C. § 103

Applicant's arguments filed 12/18/2007 (herein "Remarks") in regards to the prior art rejections set forth in the last office action have been fully considered and they are persuasive.

Applicant argues that Danknick (U.S. Patent No. 6,021,429) does not teach limiting a list of network addresses to those devices similar to the device performing the discovery. This argument is deemed persuasive. Accordingly, the rejections set forth in the last office action have been withdrawn. But, newly rejections are presented below in view of newly discovered prior art.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 3-6, 8-11, 21, and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Claim 1 recites that “the controller is ... adapted to ... limit the list of other imaging device network addresses to those other imaging devices that are similar to the imaging device” (emphasis

added), which is not supported by the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-6, 8-11, and 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danknick (U.S. Patent No. 6,021,429) in view of the HTTP 1.0 Specification (Request for Comments: 1945, Berners-Lee et al., May 1996) and Sugiyama (U.S. Patent No. 6,965,958).

As to claim 1, Danknick teaches an imaging device comprising:

an image generator (print engine), wherein the image generator (print engine) is a print engine internal to a first imaging device (printer) [see fig. 2, col. 5, ll. 45 to col. 6, ll. 49];

a network interface (30), wherein the network interface (30) is adapted to couple the first imaging device (printer) to a network (LAN) [see fig. 2, col. 5, ll. 45 to col. 6, ll. 49];

an embedded server (CPSOCKET module embedded within the NEB) with a management facility (CPSOCKET provides various management operations such as NEB control) [see fig. 2, col. 8, ll. 29-64];

a controller (NEB) coupled to the network interface (30) and the image generator (print engine), wherein the controller (NEB) is internal to the first imaging device (printer) and is adapted to store (capable of storing) a list of other imaging device network addresses (list of device addresses in the NEB) [see fig. 2, col. 8, ll. 29-64];

wherein the controller (NEB) is adapted to communicate the list of other imaging device network addresses (list of device addresses in the NEB) through the network interface (30) to an imaging device management facility (network administrator's remote computer) upon request [see fig. 2, col. 8, ll. 29-64]; and

wherein the controller (NEB) is further adapted to discover the list of other imaging device network addresses (list of device addresses in the NEB).

1. A webserver is a server that communicates using HTTP. Danknick does not expressly disclose that the server (CPSOCKET module embedded within the NEB) communicates using HTTP. Thus, Danknick does not expressly disclose that the server (CPSOCKET module embedded within the NEB) is a webserver.

Nonetheless, HTTP was well known in the art and provided known advantages, as evidenced by the HTTP 1.0 Specification. The HTTP 1.0 Specification recites known advantages to using HTTP on page 1 as follows:

"The Hypertext Transfer Protocol (HTTP) is an application-level protocol with the lightness and speed necessary for distributed, collaborative, hypermedia information systems. It is a generic, stateless, object-oriented protocol which can be used for many tasks, such as name servers and distributed object management systems, through extension of its request methods (commands). A feature of HTTP is the typing of data representation, allowing systems to be built independently of the data being transferred."

It would have been obvious to one of ordinary skill in the art to use HTTP to communicate in the instant case for at least the reasons set forth in the HTTP specification as quoted above.

2. Danknick shows the list of other imaging device network addresses in figure 8. The list shown only includes printers, facsimiles, and copiers, which are clearly “similar” to the imaging device (the printer) (see Danknick at fig. 8). But, Danknick does not expressly disclose that the controller (NEB) is adapted to limit the list of other imaging device network addresses (list of device addresses in the NEB) to those other imaging devices that are similar to the imaging device (printer).

Danknick discloses that one of the reasons for maintaining a device list was so that “various devices were able to retrieve a device address for a device on the LAN, and access the device using the device address” [see Danknick at col. 1, ll. 18-20]. It was well known in the art to limit such a list prior to providing the list to such a device on a LAN, as evidenced by Sugiyama.

In a similar art, Sugiyama teaches a server (10) that maintains a list of device addresses (see fig. 2). The server (10) processes inquiries comprising search conditions and responds with a list of devices that meet the conditions [see Sugiyama at col. 8, ll. 14-21]. This processing function is clearly capable of limiting the list to devices similar to a printer seeing as devices are categorized by function, such as whether they have a “printing function” [see Sugiyama at col. 4, ll. 30-34].

It would have been obvious to one of ordinary skill in the art to adapt Danknick’s NEB to perform the searching taught by Sugiyama. A motivation for doing so would have been to efficiently find various resources on the network [see Sugiyama at col. 1, ll. 26-31].

As to claim 3, Danknick teaches that the controller (NEB) is adapted to mirror (capable of mirroring) the list of other imaging device network addresses (list of device addresses in the NEB)

through the network interface (30) to another imaging device (printer, copier, fax machine, or terminals such as a PC) upon request [column 7, line 45 – column 8, line 64].

As to claim 4, Danknick teaches that the controller (NEB) is adapted to store (capable of storing) a list of other network addresses in a media that is selected from the group consisting of SRAM, DRAM, a non-volatile memory device, a register, and optical media [column 7, line 45 – column 8, line 64].

As to claim 5, the claim further limits the imaging device usage information, which is not necessarily required by claim 1 and which was not necessarily relied upon by the examiner to meet claim 1.

As to claim 6, Danknick teaches that the list of other network addresses is a sequential list [column 7, line 45 – column 8, line 28].

As to claim 8, Danknick teaches that discovering the list of other network addresses further comprises pinging network addresses [column 10, lines 25-45].

As to claim 9, Danknick teaches that discovering the list of other network addresses is scheduled to occur at specific times (expiration times), and where the supplemental information (an indicator that an address may not be current) on the other imaging devices (other printer, faxes, copiers corresponding to the addresses in the list) is updated during the scheduled discovery times (expiration times) [column 10, lines 25-45].

As to claim 10, Danknick teaches a history list of previously valid network addresses is utilized in discovering the list of other network addresses [column 10, lines 25-45].

As to claim 11, Danknick teaches that a network device at a network address notifies the first imaging device when the network device comes online (see imaging devices operating as slaves) [column 12, line 1 – column 13, line 4].

As to claim 21, Danknick teaches that the list of other imaging device network addresses (list of device addresses in the NEB) contains supplemental information on each of the other imaging devices (imaging devices having addresses in the list of device addresses), where the supplemental information is imaging device features, imaging device configuration, imaging device usage information, or imaging device status (device type, device features, device address information, interface information, control information, configuration information, statistics, or an indication that an address is not current) [figure 2; column 7, line 45 - column 8, line 64; column 10, lines 25-45].

As to claim 22, Sugiyama teaches limiting a list of imaging device network addresses with regard to imaging device type or features [see Sugiyama at col. 4, ll. 30-34, col. 8, ll. 14-21].

As to claim 13, Danknick teaches a computer-usable medium having computer readable instructions stored thereon for execution by a processor of an imaging device to perform a method comprising:

determining a list of network addresses (list of device addresses in the NEB) for other imaging devices (printers, faxes, copiers, or terminals such as a PC) similar to a first imaging device (printer), wherein the first imaging device (printer) contains a print engine [figure 2; column 5, line 45 – column 8, line 64];

storing a list of other network addresses (list of device addresses in the NEB) on a first imaging device (printer) [figure 2; column 8, lines 29-64]; and

communicating with the other similar imaging devices (printers, faxes, copiers, or terminals) utilizing a management facility on an embedded server (CPSOCKET module embedded within the NEB) of the imaging device (printer) by referring to the list of other network addresses (list of

device addresses in the NEB) for the other imaging devices (printers, faxes, copiers, or terminals) [column 7, line 45 – column 8, line 64];

wherein determining a list of network addresses for other imaging devices (list of device addresses in the NEB) similar to a first imaging device (printer) further comprises determining supplemental information on the other imaging devices, where the supplemental information is imaging device features, imaging device configuration, imaging device usage information, or imaging device status (device type, device features, device address information, interface information, control information, configuration information, statistics, or an indication that an address is not current) [figure 2; column 7, line 45 - column 8, line 64; column 10, lines 25-45].

1. A webserver is a server that communicates using HTTP. Danknick does not expressly disclose that the server (CPSOCKET module embedded within the NEB) communicates using HTTP. Thus, Danknick does not expressly disclose that the server (CPSOCKET module embedded within the NEB) is a webserver.

Nonetheless, HTTP was well known in the art and provided known advantages, as evidenced by the HTTP 1.0 Specification. The HTTP 1.0 Specification recites known advantages to using HTTP on page 1 as follows:

“The Hypertext Transfer Protocol (HTTP) is an application-level protocol with the lightness and speed necessary for distributed, collaborative, hypermedia information systems. It is a generic, stateless, object-oriented protocol which can be used for many tasks, such as name servers and distributed object management systems, through extension of its request methods (commands). A feature of HTTP is the typing of data representation, allowing systems to be built independently of the data being transferred.”

It would have been obvious to one of ordinary skill in the art to use HTTP to communicate in the instant case for at least the reasons set forth in the HTTP specification as quoted above.

2. Danknick shows the list of other imaging device network addresses in figure 8. The list shown only includes printers, facsimiles, and copiers, which are clearly “similar” to the imaging device (the printer) (see Danknick at fig. 8). But, Danknick does not expressly disclose that said list or a subset thereof is limited to other imaging devices similar to the first imaging device (the printer).

Danknick discloses that one of the reasons for maintaining a device list was so that “various devices were able to retrieve a device address for a device on the LAN, and access the device using the device address” [see Danknick at col. 1, ll. 18-20]. It was well known in the art to limit such a list prior to providing the list to such a device on a LAN, as evidenced by Sugiyama.

In a similar art, Sugiyama teaches a server (10) that maintains a list of device addresses (see fig. 2). The server (10) processes inquiries comprising search conditions and responds with a list of devices that meet the conditions [see Sugiyama at col. 8, ll. 14-21]. This processing function is clearly capable of limiting the list to devices similar to a printer seeing as devices are categorized by function, such as whether they have a “printing function” [see Sugiyama at col. 4, ll. 30-34].

It would have been obvious to one of ordinary skill in the art to adapt Danknick’s NEB to perform the searching taught by Sugiyama. A motivation for doing so would have been to efficiently find various resources on the network [see Sugiyama at col. 1, ll. 26-31].

As to claim 14, Danknick teaches that the determining the list of other network addresses for other imaging devices similar to the first imaging device further comprises discovering the network addresses for other imaging devices similar to the first imaging device [column 9, line 50 – column 11, line 67].

As to claim 15, Danknick teaches a method of operating an imaging device, the method comprising:

determining a list of network addresses (list of device addresses in the NEB) and supplemental information (device type, device features, device address information, interface information, control information, configuration information, statistics, or an indication that an address is not current) for other imaging devices (other printers, faxes, or copiers) similar to a first imaging device (printer), wherein the first imaging device (printer) contains a print engine [figure 2; column 5, line 45 – column 8, line 64; column 10, lines 25-45];

storing the list of network addresses (list of device addresses in the NEB) on the first imaging device (printer), wherein the supplemental information is imaging device features, imaging device configuration, imaging device usage information, or imaging device status (device address information, interface information, control information, configuration information, statistics, or an indication that an address is not current) [figure 2; column 5, line 45 – column 8, line 64; column 10, lines 25-45];

referring to the list of network addresses (list of device addresses in the NEB) of other imaging devices (other printers, faxes, copiers, or terminals such as a PC) for communication between imaging devices [column 7, line 56 – column 8, line 12; column 14, lines 21-32]; and

directing the communication between the first imaging device (printer) and the other similar imaging devices (other printers, copiers, faxes, or a terminal such as a PC) through a network interface (30) with a server and management facility (CPSOCKET) embedded in the first imaging device (embedded within the NEB) [column 7, line 45 – column 8, line 64; column 14, lines 21-32].

1. A webserver is a server that communicates using HTTP. Danknick does not expressly disclose that the server (CPSOCKET module embedded within the NEB) communicates using HTTP. Thus, Danknick does not expressly disclose that the server (CPSOCKET module embedded within the NEB) is a webserver.

Nonetheless, HTTP was well known in the art and provided known advantages, as evidenced by the HTTP 1.0 Specification. The HTTP 1.0 Specification recites known advantages to using HTTP on page 1 as follows:

“The Hypertext Transfer Protocol (HTTP) is an application-level protocol with the lightness and speed necessary for distributed, collaborative, hypermedia information systems. It is a generic, stateless, object-oriented protocol which can be used for many tasks, such as name servers and distributed object management systems, through extension of its request methods (commands). A feature of HTTP is the typing of data representation, allowing systems to be built independently of the data being transferred.”

It would have been obvious to one of ordinary skill in the art to use HTTP to communicate in the instant case for at least the reasons set forth in the HTTP specification as quoted above.

2. Danknick shows the list of other imaging device network addresses in figure 8. The list shown only includes printers, facsimiles, and copiers, which are clearly “similar” to the imaging device (the printer) (see Danknick at fig. 8). But, Danknick does not expressly disclose that said list or a subset thereof is limited to other imaging devices similar to the first imaging device (the printer).

Danknick discloses that one of the reasons for maintaining a device list was so that “various devices were able to retrieve a device address for a device on the LAN, and access the device using the device address” [see Danknick at col. 1, ll. 18-20]. It was well known in the art to limit such a list prior to providing the list to such a device on a LAN, as evidenced by Sugiyama.

In a similar art, Sugiyama teaches a server (10) that maintains a list of device addresses (see fig. 2). The server (10) processes inquiries comprising search conditions and responds with a list of devices that meet the conditions [see Sugiyama at col. 8, ll. 14-21]. This processing function is clearly capable of limiting the list to devices similar to a printer seeing as devices are categorized by function, such as whether they have a “printing function” [see Sugiyama at col. 4, ll. 30-34].

It would have been obvious to one of ordinary skill in the art to adapt Danknick’s NEB to perform the searching taught by Sugiyama. A motivation for doing so would have been to efficiently find various resources on the network [see Sugiyama at col. 1, ll. 26-31].

As to claim 16, Danknick teaches that the determining the list of network addresses for other imaging devices similar to the first imaging device further comprises discovering the network addresses for other imaging devices similar to the first imaging device [column 5, line 45 – column 6, line 49].

As to claim 17, Danknick teaches that the discovering the list of other network addresses further comprises pinging network addresses [column 10, lines 25-45].

As to claim 18, Danknick teaches:

notifying the first imaging device when an imaging device associated with a network address of the list of network addresses for other imaging devices comes online (see imaging devices operating as slaves) [column 12, line 1 – column 13, line 4].

As to claim 19, Danknick teaches mirroring the list of other imaging device network addresses through the network interface (30) to another imaging device upon request (to a PC with a display for displaying images) [column 13, lines 18-47].

As to claim 20, the claim further limits the imaging device usage information, which is not necessarily required by claim 1 and which was not necessarily relied upon by the examiner to meet claim 15.

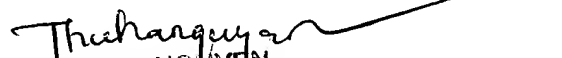
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip S. Scuderi whose telephone number is (571) 272-5865. The examiner can normally be reached on Monday-Friday 9:00 am - 5:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B. Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Philip S Scuderi/


THU HA NGUYEN
PRIMARY EXAMINER